

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	(lubricant or lubricating) and calcium adj sulfonate with thicken\$4 and buffer and gear	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:45
S2	20	(lubricant or lubricating) and calcium adj sulfonate with thicken\$4 and gear	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:45
S3	10	S2 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:46
S4	4	S3 and carbonate	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:47
S5	0	S4 and particle with diameter	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:47
S6	4	S4 and particle	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:47
S7	4	S3 and calcium adj borate	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 08:53
S8	3	US-4560489-\$.DID. OR WO-2004029184-\$.DID.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 08:58
S9	2	"7452850".pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:22
S10	13	buffer adj particle and lubricant and gear	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:25
S11	8	S10 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:25
S12	4	S11 and diameter	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:25
S13	1	buffer adj particle and lubricant and calcium adj sulfonate	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:27
S14	3	buffer with particle and lubricant and calcium adj sulfonate	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:27

S15	3	buffer with particle and lubricant and (calcium or alkaline) near sulfonate	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:28
S16	18	buffer with particle and lubricant and (calcium or alkaline) with sulfonate	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:28
S17	7	S16 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:28
S18	526	lubricant and particle with gear	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:31
S19	217	S18 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:31
S20	21	S19 and particle adj diameter	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:31
S21	3	S20 and "508".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:32
S22	0	S21 and calcium adj sulfonate	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:34
S23	0	S21 and sulfonate	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:34
S24	264	gear and fine adj particle and (lubricant or lubricating)	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2009/09/18 09:36
S25	124	S24 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:36
S26	5	S25 and calcium adj sulfonate	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:36
S27	28	S25 and thicken\$4	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:41
S28	15889	lubricant and (fine or buffer) adj particles	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:43
S29	307	S28 and "508".clas.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/09/18 09:43
S30	154	S29 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:44

S31	39	S30 and gear	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 09:44
S32	35	oil and (thickener or thicken \$4) and calcium adj sulfonate and calcium adj (carbonate or borate) and particle	USPAT	OR	OFF	2009/09/18 10:17
S33	79	oil and (thickener or thicken \$4) and calcium adj sulfonate and calcium adj (carbonate or borate) and particle	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2009/09/18 10:17
S34	109	oil and (thickener or thicken \$4) and calcium adj sulfonate and calcium adj (carbonate or borate) and particle	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/09/18 10:17
S35	73	S34 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 10:17
S36	11	S35 and buffer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 10:18
S37	62	S35 not S36	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 10:28
S38	694	(508/387,390,391).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/09/18 11:49
S39	773	(508/459,460,462).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/09/18 11:50
S40	1354	S38 or S39	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 11:50
S41	376	S40 and calcium adj sulfonate	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 11:51
S42	212	S41 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 11:51
S43	68	S42 and calcium adj (carbonate or sulfonate adj complex)	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 11:52
S44	30	S43 and thicken\$4	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 11:52

S45	30	S44 and oil	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 11:52
S46	20	S44 and particle	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 11:53
S47	21	(lubricant or lubricat\$4) and calcium adj sulfonate and thicken\$4 and (polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide adj fluororesin or urethane) adj resin	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 13:10
S48	16	S47 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 13:11
S49	1	(lubricant or lubricat\$4) and calcium adj sulfonate with thicken\$4 and (polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide adj fluororesin or urethane) adj resin	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 13:24
S50	14	(lubricant or lubricat\$4) and sulfonate with thicken \$4 and (polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide adj fluororesin or urethane) adj resin	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 13:24
S51	10	S50 and @ad<"20040324"	US-PGPUB; USPAT; USOCR	OR	ON	2009/09/18 13:25
S52	23	(lubricant or lubricat\$4) and sulfonate with thicken \$4 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:39

S53	0	(lubricant or lubricat\$4) and sulfonate near thicken\$4 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:39
S54	30	(lubricant or lubricat\$4 or grease) and sulfonate with thicken\$4 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:39
S55	19	S54 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:40

S56	43	(lubricant or lubricat\$4 or grease or oil) and sulfonate with thicken\$4 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:55
S57	25	S56 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:56
S58	6	S57 not S55	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/18 13:56
S59	84	(lubricant or lubricat\$4 or grease or oil) and (sulfonate or sulphonate or sulfonic or sulphonic) with thicken\$4 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:12

S60	48	S59 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:13
S61	23	(lubricant or lubricat\$4 or grease or oil) and (calcium or alkaline) with (sulfonate or sulphonate or sulfonic or sulphonic) with thicken\$4 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluoro resin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:16
S62	13	S61 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:16
S63	200	(lubricant or lubricat\$4 or grease or oil) and (sulfonate or sulphonate or sulfonic or sulphonic) with thicken\$4 and (buffer adj particle or fine adj particle or (polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluoro resin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:20

S64	128	S63 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:21
S65	48	S64 and ((polyolefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluoro resin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:21
S66	2	"4560489".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:33
S67	0	S66 and ((polyolefin or poly adj olefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) adj resin or fluoro resin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:40



S68	0	S66 and ((polyolefin or poly adj olefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) with resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:40
S69	212	calcium adj sulfonate and (baseoil or oil) and ((polyolefin or poly adj olefin or polyamide or polyester or polyurethane or polyacetal or polyphenylene adj oxide or polyimide or urethane or thermosetting adj urethane) with resin or fluororesin or thermoplastic adj elastomer adj olefin or thermoplastic adj elastomer adj urethane or thermoplastic adj elastomer adj polyester or thermoplastic adj elastomer adj polyamide or thermoplastic adj elastomer adj fluorine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:42
S70	159	S69 and @ad<"20040324"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:43
S71	112	S70 and particle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:43
S72	37	S71 and "508".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 13:44

S73	27	"KITAHATA, KOUJI".in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:46
S74	66	"KASAHARA, FUMI AKI".in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:46
S75	56	"SHIRAI, YOSHIMASA".in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:47
S76	52	"OKANIWA, TAKASHI".in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:47
S77	676	"YAMAZAKI, SATOSHI".in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:48
S78	221	"KYODO YUSHI CO".as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:49
S79	1024	S73 or S74 or S75 or S76 or S77 or S78	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:49
S80	8	S79 and oil and calcium adj sulfonate and (particle or buffer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2009/09/21 16:50

8/ 28/ 2010 10:46:40 AM

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